

ABSTRACT

An optical coupling system having a high efficiency in coupling light from a light source to an optical fiber. The system may have a ball lens and an aspherical lens situated
5 along the same optical path. The ball lens may be glass and the aspherical lens may be plastic. The ball lens may have optical aberrations common to spherical lenses. The aspherical lens may compensate for such aberrations. The glass ball lens may carry more power and have better thermal properties than the plastic
10 lens, and thus compensate for latter's possibly weaker thermal properties. Together, the system may have sufficient power, low distortion, good thermal characteristics and high coupling efficiency.